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SERIAL NO.: 10/041,034
FILING DATE: December 28, 2001
TITLE: Customization of Client-Server Interaction in an Internet Application
EXAMINER: Unknown
ART UNIT: 2152
ATTY.DKT.NO.: PA2066US

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Commissioner for Patents
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

The captioned application is U.S. Serial No. 10/041,034, filed December 28, 2001.

Before action, please amend the captioned application as follows.

IN THE CLAIMS

Please cancel claims 1-3 without prejudice. Please add the following scannable version of new claims 4-77.

1. (CANCELED)
2. (CANCELED)
3. (CANCELED)

04/25/2002 BABRAHA1 00000070 10041034

01 FC:103 972.00 OP
02 FC:102 1260.00 OP

1 4. (New) A customizable application system comprising:

2 an internet application system configured to support an internet application, the internet
3 application associated with metadata configured for generating a plurality of
4 application user interfaces each having a customizable interaction model, the
5 internet application system including,

6 a) a user interface generator configured to generate the application user
7 interface, and

8 b) a web application server configured to deliver the application user
9 interface to a client;

10 a personalization system including a personalization engine and a user profile interface,
11 the personalization system configured to modify personalization data
12 characterizing the customizable interaction model in more than one of the
13 plurality of application user interfaces; and

14 a data repository including a data record for storing the personalization data, the data
15 record being accessible using the metadata.

1 5. (New) The customizable application system of claim 4, wherein members of the plurality of
2 application user interfaces include separately configurable interaction models.

1 6. (New) The customizable application system of claim 4, wherein timing of communication
2 between the client and the web application server is responsive to the interaction model.

1 7. (New) A system for developing an internet application including an application user interface,
2 the system comprising:
3 an integrated development environment configured for a developer to specify a user
4 interface element in the internet application user interface, the user interface
5 element having a user customizable interaction model, the user customizable
6 interaction model configured to determine timing of communication between a
7 client displaying the application user interface and a server supporting the internet
8 application;
9 an application designer configured to produce metadata to characterize the user
10 customizable interaction model; and
11 a data repository including a user modifiable data record configured to further
12 characterize the user customizable interaction model, the data record being
13 accessible using the metadata.

1 8. (New) The system of claim 7, wherein the integrated development environment is further
2 configured to specify display of an interaction model control command in the application
3 user interface; the interaction model control command being configured for a user to
4 change the user customizable interaction model.

1 9. (New) The system of claim 7, wherein the user customizable interaction model includes
2 deferred and immediate modes.

1 10. (New) The system of claim 7, wherein the user customizable interaction model is
2 configurable according to the identity of a user or the identity of the client.

1 11. (New) The system of claim 7, wherein a state of the user customizable interaction model is
2 further configurable to persist between uses of the application user interface.

1 12. (New) The system of claim 7, wherein the user modifiable data record is user modifiable
2 using a configuration system.

1 13. (New) The system of claim 7, wherein the user modifiable data record is user modifiable
2 using a personalization system.

1 14. (New) The system of claim 13, wherein the personalization system is included in the internet
2 application.

1 15. (New) An customizable application system comprising:

2 an internet application system configured to support an internet application;

3 an application user interface including a user interface element, the application user

4 interface configured as an interface between the internet application and a user,

5 the user interface element including a customizable interaction model, the user

6 interface element configured for delivery to a client over a computer network;

7 metadata characterizing the customizable interaction model; and

8 a data repository including a data record for characterizing with the customizable

9 interaction model, the data record being user modifiable and being accessible

10 using the metadata.

1 16. (New) The customizable application system of claim 15, wherein the application user
2 interface is configured for display on the client using standard web browser protocols.

- 1 17. (New) The customizable application system of claim 15, wherein the application user
2 interface is further configured for display on the client using features of a web browser,
3 the features not requiring a browser add-on, plug-in, or extension.
- 1 18. (New) The customizable application system of claim 15, further including means for
2 generating the application user interface using the metadata.
- 1 19. (New) The customizable application system of claim 15, further including a configuration
2 system configured to modify the data record.
- 1 20. (New) The customizable application system of claim 19, wherein the configuration system is
2 included in the internet application.
- 1 21. (New) An internet application system comprising:
2 a user interface generator configured to generate an application user interface, the
3 application user interface being compatible with a standard web browser and
4 being generated in response to a request from a user, the user interface including a
5 user customizable interaction model, the user customizable interaction model
6 configured to determine timing of communication from a client displaying the
7 application user interface;
8 a web application server configured to deliver the application user interface to the client;
9 and
10 an internet application accessible to the user through the generated application user
11 interface.

1 22. (New) The internet application system of claim 21, wherein the user interface generator is
2 further configured to use metadata to characterize the user customizable interaction
3 model.

1 23. (New) The internet application system of claim 21, wherein the user customizable interaction
2 model is specific to a user interface element included in the application user interface.

1 24. (New) The internet application system of claim 21, wherein the user interface generator is
2 further configured to use a user modifiable data record to characterize the user
3 customizable interaction model.

1 25. (New) The internet application system of claim 24, wherein the internet application includes
2 a configuration system configured to modify the user modifiable data record.

1 26. (New) The internet application system of claim 21, wherein the user customizable interaction
2 model is responsive to an identity of the client or to an identity of the user.

1 27. (New) The internet application system of claim 21, wherein the user customizable interaction
2 model includes deferred and immediate modes.

1 28. (New) The internet application system of claim 21, wherein the client is wireless system.

1 29. (New) An internet application comprising:

2 a computer program configured to run on an internet application system;

3 an application user interface including a user interface element with a customizable

4 interaction model, the application user interface configured for delivery to a client

5 and to operate as an interface between a user and the computer program;

6 a user modifiable data record stored in a location physically remote from the client, the

7 data record configurable for use by a user interface generator to generate the

8 application user interface, the data record further configurable to characterize the

9 customizable interaction model; and

10 metadata configurable for use by the user interface generator to access the user

11 modifiable data record.

12 30. (New) The internet application of claim 29, wherein the customizable interaction model

includes deferred and immediate modes.

1 31. (New) The internet application of claim 29, wherein the user interface generator is responsive

2 to an identity of the user.

1 32. (New) The internet application of claim 29, further including a personalization system

2 configured to modify the user modifiable data record.

1 33. (New) An application user interface configured for communication between a user and an
2 internet application, the application user interface being generated using metadata
3 configured to access a user modifiable data record, the application user interface
4 including a user interface element configured for display using a standard web browser,
5 the user interface element including a user customizable interaction model, the user
6 customizable interaction model being characterized by the user modifiable data record.

1 34. (New) The application user interface of claim 33, wherein the metadata is configured to
2 access the user modifiable data record responsive to an identity of the user.

1 35. (New) The application user interface of claim 33, wherein the user customizable interaction
2 model includes deferred and immediate modes.

1 36. (New) The application user interface of claim 33, wherein the user customizable interaction
2 model is responsive to a command displayed on the application user interface.

1 37. (New) A customizable application system comprising:

2 an internet application system configured to support an internet application, the internet
3 application including metadata configured for generating an application user
4 interface, the internet application system including,

5 a) a user interface generator configured to generate the application user
6 interface, and

7 b) a web application server configured to deliver the application user
8 interface to a client;

9 an application development system configured to generated the metadata, the metadata
10 being further configured to characterize a user customizable interaction model of
11 the application user interface;

12 a configuration system including a configuration engine and a configuration interface, the
13 configuration interface configured to modify configuration data characterizing the
14 user customizable interaction model; and

15 a data repository including a data record configured to store the configuration data, the
16 data record being accessible using the metadata.

1 38. (New) A method of developing an application user interface associated with an internet
2 application, the method comprising the steps of:
3 selecting a user customizable interaction model characterized by a data record, the data
4 record being stored in a data repository and being user modifiable, the data
5 repository being physically remote from a client used to display the application
6 user interface;
7 including the user customizable interaction model in the application user interface;
8 generating metadata characterizing the user customizable interaction model, the metadata
9 including a reference to the data record; and
10 storing the metadata in association with the internet application, the internet application
11 being configured for access using the application user interface.

12 39. (New) The method of claim 38, wherein the application user interface includes an interaction
13 model control command.

1 40. (New) The method of claim 38, further including determining when communication occurs
2 between the client and the internet application responsive to the interaction model.

1 41. (New) A method of generating an application user interface, the method comprising the steps
2 of:

3 accessing a page definition, the page definition including metadata associated with a
4 customizable property of a interaction model;

5 accessing a data record using the metadata, the data record being stored in a data
6 repository and being user modifiable, the data repository being physically remote
7 from a client used to display the application user interface;

8 determining a value characterizing the customizable property using the data record;

9 generating markup-language responsive to the determined value; and

10 including the generated markup-language in the application user interface; the application
11 user interface being an interface to an internet application.

12 42. (New) The method of claim 41, further including modifying the data record using a
13 personalization system.

1 43. (New) The method of claim 41, wherein the customized property includes a deferred mode.

1 44. (New) The method of claim 41, wherein the customized property is configured according to
2 an identity of a user or an identity of the client.

1 45. (New) A method of developing an HTML based application user interface including a user
2 customizable interaction model, the method comprising the steps of:
3 selecting a user customizable interaction model associated with a data record, the data
4 record being configurable for characterizing the user customizable interaction
5 model; the user customizable interaction model including a plurality of interaction
6 modes;
7 including the user customizable interaction model in the HTML based application user
8 interface;
9 generating metadata characterizing the user customizable interaction model, the metadata
10 including a reference to the data record; and
11 storing the metadata in association with an application, the application being configured
12 for access using the application user interface.

1 46. (New) The method of claim 45, wherein a mode of the user customizable interaction model is
2 responsive to a command included in the application user interface.

1 47. (New) The method of claim 45, wherein a customizable property of the user customizable
2 interaction model includes an immediate mode.

1 48. (New) The method of claim 45, wherein a customizable state of the user customizable
2 interaction model is configurable to persist between uses of the HTML based application
3 user interface.

1 49. (New) A method of customizing a interaction model in an HTML based application user
2 interface, the method comprising the steps of:
3 accessing a configuration system, the configuration system including a configuration
4 engine and a configuration interface;
5 selecting, using the configuration interface, a user interface element in the HTML based
6 application user interface, the user interface element including a user
7 customizable interaction model; and
8 specifying configuration data using the configuration interface, the configuration data
9 characterizing the user customizable interaction model and the configuration data
10 being stored in a data repository physically remote from a client used to view the
11 HTML based application user interface.

12 50. (New) The method of claim 49, further including a step of including a command,
13 configurable to modify the user customizable interaction model, in the HTML based
14 application user interface.

1 51. (New) The method of claim 49, wherein the configuration data is configurable to characterize
2 a subset of all user interface elements in the HTML based application user interface.

1 52. (New) The method of claim 49, further including a step of modifying the configuration data
2 using a personalization system.

1 53. (New) The method of claim 49, further including sending, responsive to the interaction
2 model, data from the client to a server.

1 54. (New) The method of claim 49, further including displaying the application user interface
2 using standard web browser protocols.

1 55. (New) A method of customizing an interaction model in an application user interface, the
2 method comprising the steps of:
3 accessing a configuration system, the configuration system including a configuration
4 engine and a configuration interface;
5 selecting, using the configuration interface, the interaction model in the application user
6 interface, the interaction model being user customizable;
7 specifying configuration data using the configuration interface, the configuration data
8 characterizing the interaction model;
9 storing the configuration data; and
10 generating the application user interface using the specified configuration data, the
11 application user interface being HTML based and being configured to access an
12 internet application.

1 56. (New) The method of claim 55, further including displaying the application user interface
2 using standard web browser protocols.

1 57. (New) The method of claim 55, wherein specifying configuration data includes specifying
2 deferred or immediate modes.

1 58. (New) The method of claim 55, further including changing the interaction model responsive
2 to a command displayed on the application user interface.

1 59. (New) The method of claim 55, wherein the configuration data is user modifiable.

1 60. (New) A method of executing an internet application comprising the steps of:

2 receiving a request for an application user interface from a client, the application user

3 interface including a user interface element;

4 accessing a page definition, the page definition including metadata characterizing the

5 application user interface;

6 retrieving a value characterizing a customizable interaction model associated with the

7 user interface element using the metadata, the value being stored in a data

8 repository physically remote from the client;

9 generating HTML responsive to the retrieved value;

10 including the generated HTML in the application user interface; and

11 delivering the application user interface to the client, the application user interface being

12 an interface between a user and the internet application.

1 61. (New) The method of claim 60, wherein the retrieved value is used to determine a deferred or

2 immediate mode of the customizable interaction model.

1 62. (New) The method of claim 60, wherein the customizable interaction model is specific to the

2 user interface element.

1 63. (New) The method of claim 60, further including displaying the application user interface at

2 the client using standard web browser protocols.

1 64. (New) The method of claim 60, further including identifying a requestor of the application
2 user interface, wherein the customizable interaction model is responsive to the identity of
3 the requester.

1 65. (New) A method of generating an application user interface including a customizable
2 interaction model, the method comprising the steps of:
3 accessing a page definition, the page definition including metadata characterizing the
4 customizable interaction model, the customizable interaction model configured to
5 characterize communication from a client, the client being configurable to display
6 the application user interface;
7 reading a value from a data record using the metadata, the data record being stored in a
8 data repository and being user modifiable, the data repository being physically
9 remote from the client;
10 characterizing a state of the customizable interaction model using the value;
11 generating HTML responsive to the state; and
12 including the generated HTML in the application user interface.

1 66. (New) The method of claim 65, wherein the state of the customizable interaction model
2 includes deferred or immediate modes.

1 67. (New) The method of claim 65, further including modifying the customizable interaction
2 model responsive to a user interface element included in the application user interface.

1 68. (New) The method of claim 65, wherein the state of the customizable interaction model
2 persists between uses of the application user interface.

1 69. (New) The method of claim 65, further including displaying the application user interface
2 using standard web browser protocols.

1 70. (New) The method of claim 65, wherein the step of reading a value is responsive to an
2 identity of a user of the application user interface.

1 71. (New) A method of generating an application user interface configured for delivery from
2 a server to a client, the method comprising the steps of:
3 receiving, at the server, a request for the application user interface from the client;
4 identifying the requester of the application user interface, the application user
5 interface including a user customizable interaction model;
6 accessing a page definition, the page definition including metadata and characterizing
7 the application user interface;
8 retrieving, using the metadata and the identity of the requester, a value for
9 characterizing the user customizable interaction model,, the value being stored
10 in a data repository;
11 generating HTML incorporating the interaction model using the value;
12 including the generated HTML in the application user interface; and
13 delivering the application user interface from the server to the client.

1 72. (New) The method of claim 71, further including communicating from the client to the
2 server responsive to the interaction model.

1 73. (New) The method of claim 72, wherein the communication occurs in a deferred mode.

1 74. (New) The method of claim 71, further including displaying an interaction model control
2 command in the user interface.

1 75. (New) A computer readable medium including an internet application, the internet
2 application comprising:
3 metadata defining an application user interface, the application user interface including a
4 user interface element with a user customizable interaction model, the application
5 user interface configured for delivery to a client and configured to operate as an
6 interface between a user and the internet application;
7 a user interface generator configured to generate the application user interface using a
8 user modifiable data record stored in a location physically remote from the client,
9 the user modifiable data record configurable to characterize the user customizable
10 interaction model; and
11 a configuration system configured for a user to modify the user modifiable data record.

1 76. (New) A computer readable medium including an internet application, the internet
2 application comprising:
3 an application designer configured to develop an application user interface, the
4 application user interface including a user interface element with a user
5 customizable interaction model, the application user interface configured for
6 delivery to a client and configured to operate as an interface between a user and
7 the internet application;
8 a user interface generator configured to generate the application user interface using a
9 user modifiable data record stored in a location physically remote from the client,
10 the user modifiable data record configurable to characterize the user customizable
11 interaction model; and
12 a configuration system configured for a user to modify the user modifiable data record.

1 77. (New) An application execution system comprising:
2 means for supporting an internet application;
3 means for generating an application user interface using a user modifiable data record
4 configured to store data characterizing a user customizable interaction model; and
5 means for providing the application user interface to a user, the application user interface
6 including a user interface element, the application user interface configured as an
7 interface between the internet application and the user, the user interface element
8 including the user customizable interaction model, the user interface element
9 configured for delivery to a client over a computer network.

REMARKS

The present application is U.S. Patent Application Serial No. 10/041,034 (hereinafter the "'034 Application"). This Preliminary Amendment is being filed prior to receipt of the first Office Action. The '034 Application contained claims 1-3, which are canceled by this amendment without prejudice. In addition, this Preliminary Amendment adds new claims 4-77. Therefore, claims 4-77 are presented for consideration. No new matter has been added by these amendments. All the pending claims comply with all the requirements of 35 U.S.C. Accordingly, Applicant requests examination and allowance of all pending claims.

The Examiner is respectfully requested to enter this Amendment and to examine the pending claims. The Examiner is respectfully urged to consider the claimed invention at the earliest time possible and issue a favorable action indicating the application is in condition for allowance. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone Applicant's undersigned representative at the number given below.

Respectfully submitted,

Peter Gassner et al.

Date: April 10, 2002

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